

MODIS Technical Team Meeting
Thursday, February 19, 2004
Building 33, Room E125

Vince Salomonson chaired the meeting. In attendance were Shaida Johnston, Ed Masuoka, Robert Wolfe, Steve Kempler, Jack Xiong, Dorothy Hall, Chris Justice, Greg Leptoukh, and Barbara Conboy, with Yolanda Harvey taking the minutes.

1.0 Upcoming Events

- MODIS Science Team Meeting, — POSTPONED – Date TBD
- MODIS Ocean Color Review Meeting, Aerospace Bldg., Rm. 408, Lanham, MD February 11 & 12, 2004
- AGU Joint Assembly, Montreal, Quebec, Canada. May 17-21, 2004. Deadline for abstracts: February 12, 2004 (mail) and February 19 (electronic, before 9 pm EST) <http://www.agu.org> <http://www.agu.org/meetings/sm04/index.shtml>
- MODIS Vegetation workshop II, University of Montana, 17 - 19 August 2004

2.0 Meeting Minutes

2.1 General Discussion

Salomonson said that the review of ocean color results from MODIS and SeaWiFS went well on February 11 and 12. The review team was chaired by Jim Mueller, with Bob Arnone, Stu Biggar, Carol Johnson, Ron Zaneveld, and Alan Holmes also serving on the committee. A report will be prepared by the review team and issues in the next week or so. The report will cover both technical and programmatic matters.

2.2 Instruments

Xiong reported that the Terra SFE-A was shut down yesterday at around 9:30 am local time. It happened when the satellite went through the South Atlantic Anomaly. The problem was fixed after performing a recycle, and came back on-line today at 11:11 am. The result was a little over 24 hours of data lost.

Xiong reported that a few minutes of DB data were lost on Tuesday due to attempts to fix the TDRSS linkage.

Xiong reported that the MODIS instruments themselves are working normally. On Wednesday and Thursday of last week, there was a calibration review, which went well. MCST is slowly engaging with the new Oceans team as well.

2.3 DAAC

Kempler reported that Aqua and Terra MODIS are at the leading edge of forward processing, and a few days ahead on reprocessing (Aqua is 5 days ahead). Everything is operating nominally; there are no new or existing problems to report on, other than the firewall issue.

Masuoka reported that the problem as it stands is that there is a firewall between MODAPS and the PDR server hose throughput that has degraded (managed by the GES DAAC or ECS contractor). The firewall is looking up the name of the system pushing data

to it, but the lookup takes so long that it often times out. To mitigate the problem, the vendor might be able to patch it, we can remove the firewall, or we can replace it. As of this meeting, the data flow has gotten so slow that we have turned off Aqua reprocessing. Salomonson asked if there has been any problem sending the L1A subset to Oceans, and Kempler said no, because it's sent a different way. Kempler stated that removing the firewall is very uncomfortable because it goes against the grain of enhancing computer security. Any compromise to one of the MODAPS/DAAC systems would compromise the other. In addition, replacing the firewall would be drastic until there are no other options, but to do so. Kempler assured that fixing this problem is a high priority and that DAAC engineers, Landover engineers, and the vendor are working through it. (Note: the GES DAAC and ECS contractor worked with the vendor and the problem was solved with a software patch to the firewall which brought the transmission rate back to 30MB per second from the 2MB per second that had existed since the problem began.)

Kempler asked if they should still be sending data to Miami, and Masuoka said yes, since Peter Minnett still uses the data for SST. MODAPS only needs the Aqua L1A subset for reprocessing. Masuoka also said that he will ask Gene if Miami still needs a separate feed from the GDAAC, since Gene is also sending them the subsetted data.

2.4 SDST

Masuoka reported that they've gotten the data corruption problem down to two possibilities. They're running a test today to see if the corruption is due to a problem in the DAAC router or the EBNET router. The DAAC router is the most likely candidate since it is running at 100% utilization and is dropping packets. They're hoping they might be able to retire it and reroute the data to another, better router. Johnston asked how much effort it will take to retire it, and Masuoka said that it should be a pretty simple process.

Teague will talk about the MODAPS unattended processing test at next PIP meeting, in which production under software control was compared to production rates when the system was run by the operations staff.

Wolfe reported that he went to an Earth System Science and Applications Advisory Committee (ESSAAC) Subcommittee for Information System and Services (ESSIS) meeting and gave a well-received presentation about the results from the SGWD Data Accessibility and Usability workshop. At the meeting there was a lot of talk about the new Grid computing technology that helps transfer data between groups and share data-processing loads. Other science communities, including Physics and Biology, are adopting this technology. He also picked up on the message we need to learn more about data already have before NASA starts designing new missions, and that though many users are getting EOS data, there still are communities that are not well served. Some mention was also made of the difficulty of combining MODIS and MISR data. Wolfe said that combining the data sets is possible, though not easy. Salomonson said that he would bring these points up at the next Terra Telecon.

2.5 Land

Justice inquired about the procurement process progress for the investigations resulting from the latest NRA. Salomonson said that progress is being made albeit slow because of the large amount of material required to complete the procurement packages. Justice

asked if there is a final list of team members, and Salomonson said he would send him the list that appears to be nearly final. The count now shows a little over 70 people appointed to the MODIS Science Team.

Justice reported that Steve Running will be holding a workshop in Missoula MT in mid August (17-19, details in section 1.0).

3.0 Action Items

3.1 New Action Items

3.1.1 Masuoka to ask Gene if Miami still needs a separate feed from the GDAAC, since Gene is also sending them the subsetted data.

3.2 Old Action Items

3.2.1 Tech Team to further discuss TRW using MODIS data for validation of the NPP/NPOESS production process.

Status: Open.

3.2.2 Kempler to bring back some proposals for how the disciplines can deal with the DAAC distribution problem.

Status: Open.